

13. (Amended) Light waver^{er} converter assembly, as claimed in claim 2, wherein the converter substance is chosen from substances, which, when optically excited, can luminesce. SP

14. (Amended) Light waver^{er} converter assembly, as claimed in claim 8, wherein the converter substance is chosen from substances, which, when optically excited. SP

B' *now incomplete!* 15. (Amended) Light wave converter assembly, as claimed in claim 1, wherein the converter substance is at least one of inorganic dyes, including the auxiliary group elements and elements from the group of lanthanides, and organic dyes, including the class of perylenes, aldazines, thioxanthenes and/or naphthalimides. *

16. (Amended) Light wave converter assembly, as claimed in claim 2, wherein the converter substance is at least one of inorganic dyes, including the auxiliary group elements and elements from the group of lanthanides and organic dyes, comprising the class of perylenes, aldazines, thioxanthenes and/or naphthalimides.

17. (Amended) Light wave converter assembly, as claimed in claim 8, wherein the converter substance is at least one of inorganic dyes, including the auxiliary group elements and elements from the group of lanthanides and organic dyes, including the class of perylenes, aldazines, thioxanthenes and/or naphthalimides.

21. (Amended) Light wave converter assembly, as claimed in claim 1, wherein the diameter of the exit port ranges from 1 to 10 mm.

22. (Amended) Light wave converter assembly, as claimed in claim 2, wherein the diameter of the exit port ranges from 1 to 10 mm.

23. (Amended) Light wave converter assembly, as claimed in claim 8, wherein the diameter of the exit port ranges from 1 to 10 mm.

24. (Amended) Light wave converter assembly, as claimed in claim 1, including a coupling or a thread.

26. (Amended) Light wave converter assembly, as claimed in claim 1, wherein the converter assembly is a hot steam sterilized converter assembly.

31. (Amended) Process, comprising the steps: a) provision of a light wave converter assembly, comprising a light guide and a light wave converter, wherein the light wave converter exhibits a converter substance, which in use converts a part of incident light into light of a longer wavelength, and wherein the converted light is guided together with a portion of the unconverted light to an exit port, and b) connection of the light wave converter to a polymerization device, c) at least one of illumination and transillumination of hard tooth